

DEVAL L. PATRICK GOVERNOR TIMOTHY P. MURRAY LIEUTENANT GOVERNOR JUDYANN BIGBY, MD SECRETARY

JOHN AUERBACH COMMISSIONER

## The Commonwealth of Massachusetts

Executive Office of Health and Human Services
Department of Public Health
William A. Hinton State Laboratory Institute
305 South Street, Jamaica Plain, MA 02130

06/28/2011

Jenifer Kirshenbaum Assistant District Attorney, Essex County

Dear ADA Kirshenbaum,

Enclosed is the information you requested in regards to Commonwealth vs. Included are copies of the following:

- 1. Curriculum Vitae for Annie Dookhan, and Lisa Glazer
- 2. Drug Analysis Laboratory Receipt.
- 3. Control Cards with analytical results for samples #

4. Analysis sheets with custodial chemist's hand notations and test results.

5. GC/Mass Spectral analytical data for samples #

Annie Dookhan was the custodial chemist and performed the preliminary testing and net weight for this sample. Lisa Glazer was the confirmatory chemist and analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

Annie Dookhan

Chemist II

Sincerely

Drug Analysis Lab

Jamaica Plain, MA. 02130

(617) 983-6631

### Curriculum Vitae

## Annie Khan (Dookhan)

### Education:

University of Massachusetts, Boston, Ma, Master of Science in Chemistry. University of Massachusetts, Boston, Ma, Bachelor of Science in Biochemistry.

### Experience:

2003 - present

Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

- \*Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.
- \*Appointed Assistant Analyst by Assistant Commissioner of Public Health, 2004.
- \*Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.
- \*Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.
- \*Maintenance and repairs of all analytical instruments.
- \*Responsible for the Quality Control of all analytical instruments, reagents and controls/standards.
- \* Responsible for the Quality Control/Quality Assurance program for the drug lab.
- \*Notary Public.
- \*Qualified as an expert witness in Massachusetts Courts and U.S. District Court

2001 - 2003

OC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

- \*Completed proficiency training conducted by a member of the staff within the MLB Quality Control and Quality Assurance Department.
- \*Method Development for creating new techniques and enhancing vaccines for the QC Dept. and FDA.
- \*Writing, revising and reviewing Standard Operating Procedures (SOPs).
- \*Trained and supervised new chemists and interns for the department.
- \*Routine OC testing of products for the FDA.
- \*Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.
- \*Calibration, preventive maintenance, QC and QA of analytical instrumentation.
- \*Complete testing of chemicals for Vendor Validation Project for the FDA.
- \*Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

### Additional Training:

Dept. of Justice - Forensics Professionals. (numerous trainings)

GLP/GMP course with Massachusetts Biologic Laboratory.

QC/QA training according to FDA Codes and Regulations.

GC and GC/MS courses with Agilent Technologies and Restek.

HPLC course with Waters Cooperation.

FTIR course with Spectros.

TOC training with MBL and Sievers.

### Association:

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

## Curriculum Vitae

### Lisa A. Glazer

## Education

Bachelor of Science Degree, CHEMISTRY January 2006 UNIVERSITY OF NEW HAVEN

Coursework included: Organic Chemistry, Inorganic Chemistry, Quantitative Analysis, Instrumental Analysis, Physical Chemistry, Physics, Calculus

Bachelor of Science Degree, FORENSIC SCIENCE January 2006 UNIVERSITY OF NEW HAVEN

Coursework included: Organic Chemistry, Quantitative Analysis, Instrumental Analysis, Physical Chemistry, Physics, Calculus, Biology, Criminal Justice and Forensic Science courses

## Employment -

Chemist I, II State Laboratory Institute (May 2007-Present)

Massachusetts Department of Public Health

Drug Analysis Laboratory

- Responsible for the identification of substance to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation for the purpose of performing forensic drug analysis
- Successfully completed an eight week training course in the analysis of drugs conducted by senior staff of the Department of Public Health, Drug Analysis Laboratory
- > Appointed an assistant analyst for the Department of Public Health, Drug Analysis Laboratory in 2007.

## Laboratory Technician I (August 2006 – May 2007)

University of Connecticut Chemistry Department - Storrs, CT

- Prepared unknowns, chemical reagents and supplies for undergraduate chemistry courses
- > Set-up experiment demonstrations
- Properly disposed of hazardous waste from the experiments
- > Made sure labs were being conducted safely
- > Kept track of student laboratory paperwork, inventoried glassware and chemicals and helped clean glassware

Intern (September 2005 – November 2005)

CONNECTICUT STATE POLICE FORENSIC LABORATORY - Meriden, CT

- > Worked on a Pyrolysis Gas Chromatography project
- Observed in the GSR testing, Forensic Biology, DNA, Questioned Documents, Black and White Photo, Latent Prints, Firearms, Trace Evidence and Color Photo Units

The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health State Laboratory Institute

**Boston Drug Laboratory** Tel (617) 983-6622 Fax (617) 983-6625

Amherst Drug Laboratory Tel (413) 545-2601 Fax (413) 545-2608

**Boston Hours** 

8:00 - 11:002:00-4:00

DRUG RECEIPT

**Amherst Hours** 

9:00-12:00

1:00 - 3:00

City or Department: Haverhill Poli	ce Department Police Reference No.:
Name and Rank of Submitting Officer:	Detective Son Jan
Defendant(s) Name (last, first, initial):	
To be completed by Submitter	To be completed by Lab Personnel
Description of Items Submitted	Gross Weight Lab Number
Bag A contains 20 white pills	
bay A contains 20 white pills	11.95 on
Bag B contains 18 blue pills	17. 10 pm
	3.75
Bag C contains 20 blue pills	
	15.47 m
Bag D contains 62 blue pills	
	9.20 m
А	
Received by:	Date:Date:
Received by:	Date:

Def:

Date Rec'd: 05/18/2011

Amount:

No. Cont:

Gross Wt.:

20.0

5.47

Prelim: Oxycoclone

Cont: pb

Amount:

No. Cont:

64

Cont:

pb

1

Detective GREENWOOD

No. Analyzed: Net Weight: 1.つ9 Findings:

Subst: TAB

# DRUG POWDER ANALYSIS FORM

SAMPLE # AGENCY \	averhill ANALYST as 9
No. of samples tested:	Evidence Wt.
PHYSICAL DESCRIPTION:	Gross Wt( ):
20 white total tablet	Gross Wt ( ):
17 1 87	Pkg. Wt:
	Net Wt: 10.5390
512	
PRELIMINARY TESTS Spot Tests	Microcrystalline Tests
Cobalt Thiocyanate ( )	Gold Chloride
Marquis	TLTA ( )
Froehde's	OTHER TESTS
Mecke's	myonde AIB
PRELIMINARY TEST RESULTS	GC/MS CONFIRMATORY TEST
RESULTS 6xx0 doc	RESULTS OCCORD
DATE 5-2-11	MS OPERATOR LAC-
	DATE 6-7-11

# **Drug Information**

DRUG NAME: ACETAMINOPHEN AND OXYCODONE

INGREDIENTS: ACETAMINOPHEN -- 325 MG OXYCODONE HYDROCHLORIDE -- 5 MG

Color: white

Shape: Circle, scored

Imprint: 512
Form: Tablet

Available-Container-Size: Bottle of

100, Bottle of 500

AAPCC Code: 072702 -

Acetaminophen with Oxycodone

**NDC**: 00406-0512-01 00406-0512-05

Excipients:

Crospovidone; Povidone; microcrystalline cellulose; pregelatinized starch; Silicon

Dioxide; Stearic Acid

Regulatory Status: Schedule II

Availability: United States

Product ID 5726249

Contact: Covidien Mallinckrodt

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# DRUG POWDER ANALYSIS FORM

SAMPLE#	AGENCY Have	permill ANALYST AS2
No. of samples tested:		Evidence Wt.
PHYSICAL DESCRIPTION:		Gross Wt():
18 blue 100	ch 4951ex	Gross Wt ( ):
らく	67	Pkg. Wt:
		Net Wt: 41-0309
(224)	$\bigcirc$	
RELIMINARY TESTS Spot Tests	15	Microcrystalline Tests
Cobalt Thiocyanate ()		Gold Chloride
Marquis		TLTA ( )
Froehde's		OTHER TESTS
Mecke's		mondie A B
	•	
PRELIMINARY TEST RESULTS		GC/MS CONFIRMATORY TEST
RESULTS OGCOCOR		RESULTS oncodore
DATE 6-2-11		MS OPERATOR LAG
		DATE G-1-11

# Drug Information

DRUG NAME: OXYCODONE HYDROCHLORIDE

INGREDIENTS: OXYCODONE HYDROCHLORIDE -- 30 MG

Color: Blue
Shape: Circle
Imprint: 224

Form: Oral Tablet

Available-Container-Size: Bottle of 100, Bottle of 30, Bottle of 1000, Bottle

of 500

**AAPCC Code:** 037705 - Oxycodone Alone or in Combination (Excluding

Combination Products with

Acetaminophen or Acetylsalicylic Acid)

NDC: 57664-224-13

57664-224-83 57664-224-18 57664-224-88

UPC: 57664-22488

Excipients: Lactose

(Anhydrous); Silicon Dioxide,

Colloidal; Magnesium Stearate; Cellulose, Microcrystalline; Starch, Pregelatinized; Sodium Starch

Glycolate; FD&C Blue No. 2 Aluminum

ake

Regulatory Status: Schedule II

Availability: United States

Product ID 6952364

Contact: Caraco Pharmaceutical

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# DRUG POWDER ANALYSIS FORM

SAMPLE # AGENCY H	avorhill ANALYST AS?
No. of samples tested:	Evidence Wt.
PHYSICAL DESCRIPTION:	Gross Wt( ):
20 blue and testet	Gross Wt ( ):
17 180	Pkg. Wt:
	Net Wt: 1.7982
(v) (18/12)	
·	
PRELIMINARY TESTS	
Spot Tests	Microcrystalline Tests
Cobalt	Gold
Thiocyanate ( )	Chloride
Marquis	TLTA ( )
Froehde's	OTHER TESTS
Mecke's	
*	Myonde A B
PRELIMINARY TEST RESULTS	GC/MS CONFIRMATORY TEST
RESULTS Orgeodere	RESULTS On due
DATE 6-2-1)	MS
	OPERATOR LAG
	DATE 6-7-4

## Drug Information

DRUG NAME: OXYCODONE HYDROCHLORIDE

INGREDIENTS: OXYCODONE HYDROCHLORIDE -- 30 MG

Color: Light Blue

Shape: Circle

Imprint: 4812 The tablet is debossed with 4812 on one side and V on the

reverse side., V Form: Oral Tablet

Available-Container-Size: Bottle of 500, Bottle of 100, Bottle of 10, Bottle

of 1000

AAPCC Code: 037705 - Oxycodone Alone or in Combination (Excluding

Combination Products with

Acetaminophen or Acetylsalicylic Acid)

NDC: 00603-4992-28 00603-4992-21

UPC: 06034-99228

Excipients: FD&C Blue No. 1 Aluminum Lake ; Lactose (Monohydrate); Magnesium

Stearate; Cellulose,

Microcrystalline; Povidone; Sodium Starch Glycolate; Stearic Acid

Regulatory Status: Schedule II

Availability: United States

**Product ID** 7093498

Contact: Qualitest Pharmaceuticals

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# DRUG POWDER ANALYSIS FORM

SAMPLE#AGENCY_\_\G	LUENNIU ANALYST (A>?
No. of samples tested:	Evidence Wt.
PHYSICAL DESCRIPTION:	Gross Wt( ):
62 blue and tablet	Gross Wt ( ):
17 195	Pkg. Wt:
	Net Wt: フ,つ8 0 8
<u>M</u> 36	عصرصالهدي.
RELIMINARY TESTS Spot Tests	Microcrystalline Tests
Cobalt Thiocyanate ( )	Gold Chloride
Marquis	TLTA ( )
Froehde's	OTHER TESTS
Mecke's	musnare A B
PRELIMINARY TEST RESULTS	GC/MS CONFIRMATORY TEST
RESULTS ox coclus	RESULTS Oncoche
DATE 6-2-11	MS OPERATOR 64
	DATE 6-7-11

# **Drug Information**

DRUG NAME: OXYCODONE HYDROCHLORIDE

INGREDIENTS: OXYCODONE HYDROCHLORIDE -- 30 MG

Color: Light Blue

Shape: Circle

Imprint: M The M enclosed in a box is imprinted on one side and 30 above the score is imprinted on the reverse side., M30 The M enclosed in a box is imprinted on one side and 30 above the score is imprinted on the reverse side., 30, M 30

Form: Oral Tablet

Available-Container-Size: Bottle of

100

AAPCC Code: 037705 - Oxycodone Alone or in Combination (Excluding

Combination Products with

Acetaminophen or Acetylsalicylic Acid)

NDC: 0406-8530-01

Excipients: Cellulose,

Microcrystalline; Sodium Starch

Glycolate; Starch,

Corn; Lactose; Stearic Acid; FD&C

Blue No. 2

Regulatory Status: Schedule II

Availability: United States

**Product ID** 6594281

Contact: Covidien Mallinckrodt

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File Name : I:\06\_03\_11\790876.D

Operator : LAG

Date Acquired : 4 Jun 2011 6:41

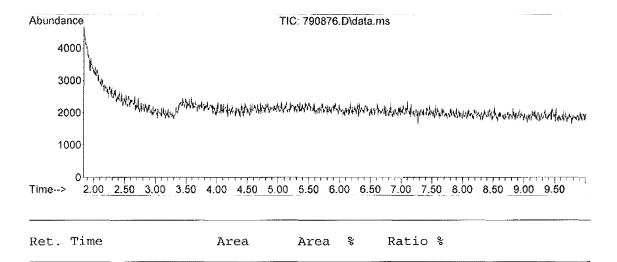
Sample Name : BLANK

Submitted by

Vial Number : 2

AcquisitionMeth: DRUGS.M

Integrator : RTE



\*\*\*NO INTEGRATED PEAKS\*\*\*

790876.D

Thu Jun 23 11:02:00 2011

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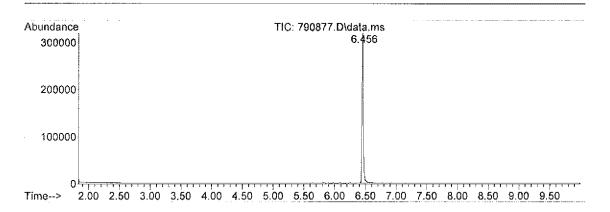
Operator : LAG

Date Acquired : 4 Jun 2011 6:54

Sample Name : OXYCODONE STD

Submitted by

Vial Number : 77
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
6.456	463347	100.00	100.00

File Name : I:\06 03 11\790877.D

Operator : LAG

Date Acquired 4 Jun 2011 6:54 Sample Name : OXYCODONE STD

Submitted by

Vial Number 77 AcquisitionMeth: DRUGS.M : RTE Integrator

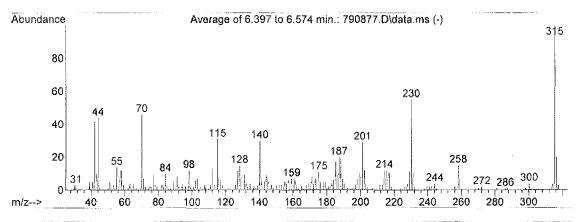
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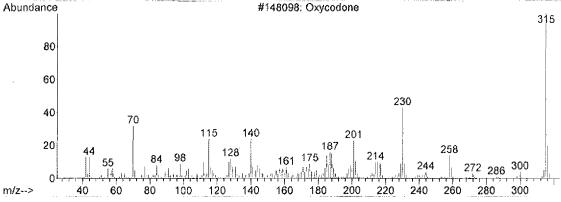
Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST08.L

C:\Database\PMW TOX2.L

PK#	RT	Library/ID		CAS#	Qual
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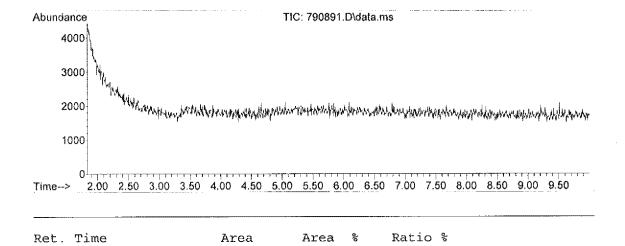


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Operator : LAG

Date Acquired : 4 Jun 2011 9:57

Sample Name : BLANK
Submitted by : ASD
Vial Number : 2
AcquisitionMeth: DRUGS.M
Integrator : RTE



\*\*\*NO INTEGRATED PEAKS\*\*\*

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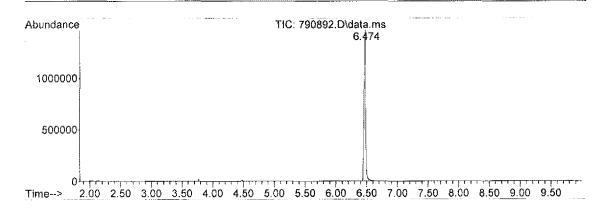
Operator : LAG

Date Acquired : 4 Jun 2011 10:10

Sample Name Submitted by

: ASD : 92

Vial Number AcquisitionMeth: DRUGS.M Integrator ; RTE



Ret. Time		Area %	Ratio %
6.474	2736498	100.00	100.00

File Name I:\06 03 11\790892.D

Operator LAG

Date Acquired 4 Jun 2011 10:10

Sample Name Submitted by Vial Number

Integrator

ASD 92 AcquisitionMeth: DRUGS.M RTE

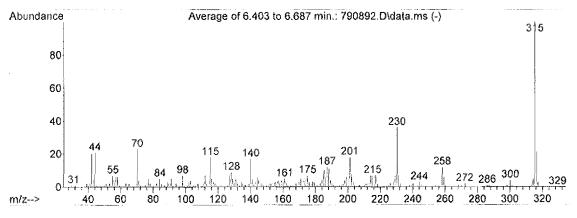
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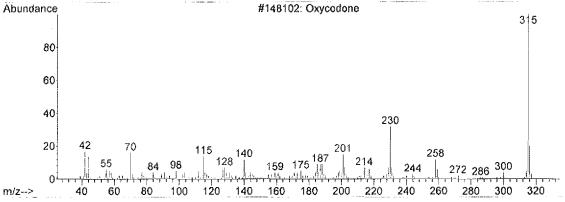
C:\Database\NIST08.L

Minimum Quality: 80

C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual.
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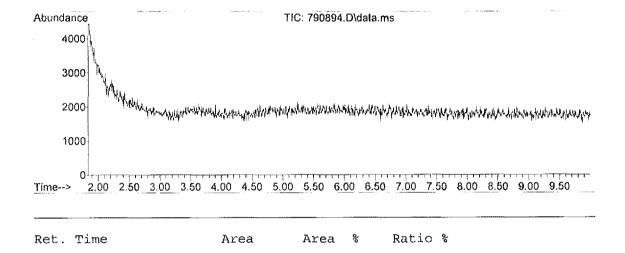


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Operator : LAG

Date Acquired : 4 Jun 2011 10:36

Sample Name : BLANK
Submitted by : ASD
Vial Number : 2
AcquisitionMeth: DRUGS.M
Integrator : RTE



\*\*\*NO INTEGRATED PEAKS\*\*\*

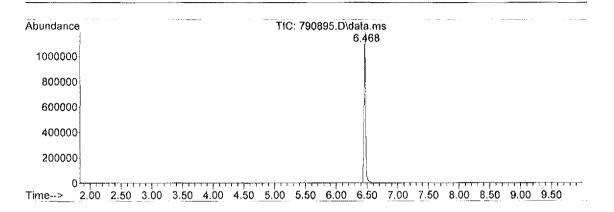
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Operator : LAG

Date Acquired : \_4 Jun 2011 10:49

Sample Name :

Submitted by : ASD
Vial Number : 95
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
6.468	2082495	100.00	100.00

File Name : I:\06 03 11\790895.D

Operator LAG

Date Acquired 4 Jun 2011 10:49

Sample Name Submitted by

ASD Vial Number 95 AcquisitionMeth: DRUGS.M Integrator : RTE

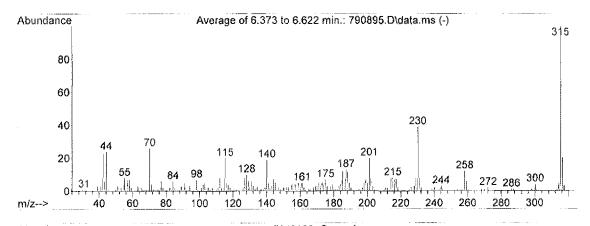
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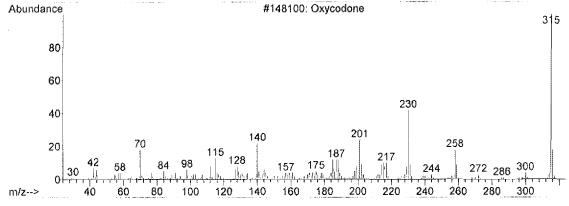
C:\Database\NIST08.L

Minimum Quality: 80

C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
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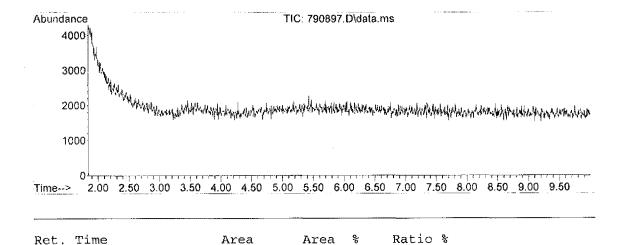


File Name : I:\06 03 11\790897.D

Operator : LAG

Date Acquired : 4 Jun 2011 11:15

Sample Name : BLANK Submitted by : ASD Vial Number : 2 AcquisitionMeth: DRUGS.M Integrator : RTE



\*\*\*NO INTEGRATED PEAKS\*\*\*

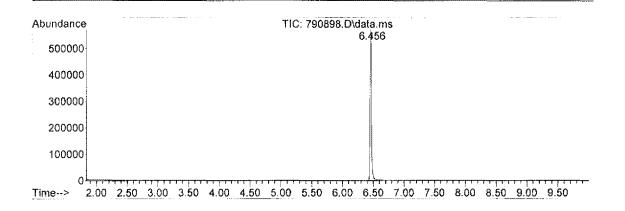
File Name : I:\06\_03\_11\790898.D

Operator : LAG

Date Acquired: 4 Jun 2011 11:29

Sample Name Submitted by

Submitted by : ASD
Vial Number : 98
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
6.456	855143	100.00	100.00

: I:\06\_03\_11\790898.D File Name

Operator : LAG

Date Acquired 4 Jun 2011 11:29

Sample Name

Submitted by ASD Vial Number 98 AcquisitionMeth: DRUGS.M Integrator RTE

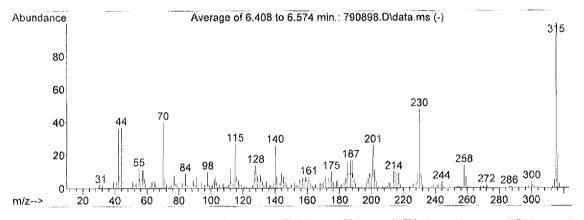
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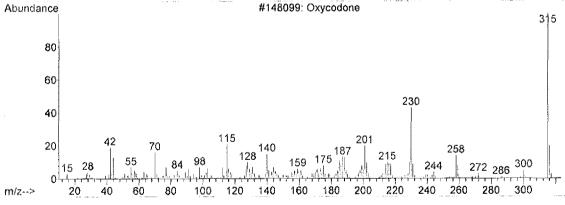
Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST08.L

C:\Database\PMW TOX2.L

PK#	RT	Library/ID	CAS#	Qual
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		Oxycodone Oxycodone	000076-42-6 000076-42-6	99 99



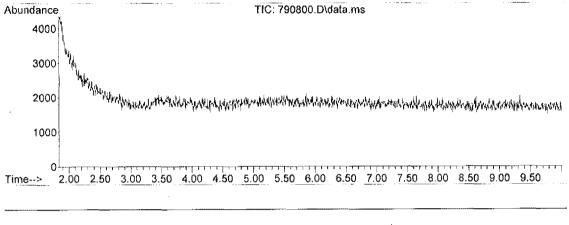


File Name : I:\06 03 11\790800.D

Operator : LAG

Date Acquired : 4 Jun 2011 11:55

Sample Name : BLANK
Submitted by : ASD
Vial Number : 2
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time

Area

Area %

Ratio %

\*\*\*NO INTEGRATED PEAKS\*\*\*

### Area Percent / Library Search Report

Information from Data File:

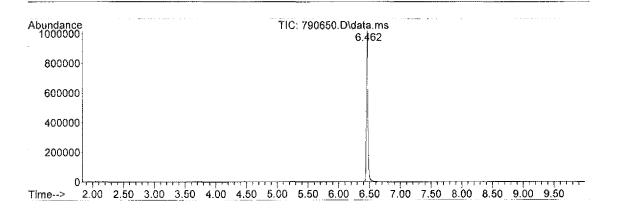
File Name : I:\06\_03\_11\790650.D

Operator : LAG

Date Acquired : 4 Jun 2011 12:08

Sample Name

Submitted by : ASD
Vial Number : 4
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
6.462	1706042	100.00	100.00

File Name I:\06\_03\_11\790650.D

Operator LAG

Date Acquired 4 Jun 2011 12:08

Sample Name

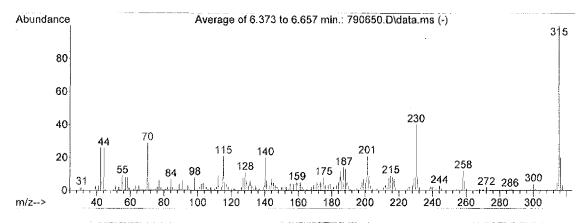
Submitted by ASD Vial Number 4 AcquisitionMeth: DRUGS.M Integrator RTE

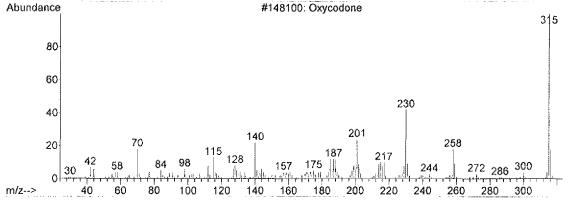
Search Libraries: C:\Database\SLI.L Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST08.L

C:\Database\PMW TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1	6.46	C:\Database\NIST08.L Oxycodone Oxycodone Oxycodone	000076-42-6 000076-42-6 000076-42-6	99 99 99



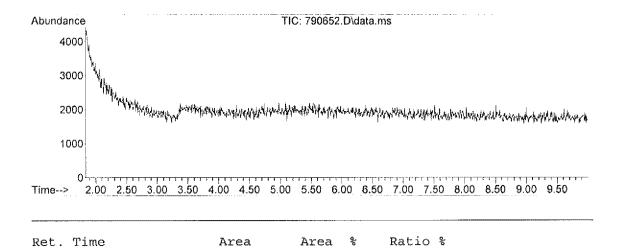


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Operator : LAG

Date Acquired : 4 Jun 2011 12:33

Sample Name : BLANK
Submitted by : ASD
Vial Number : 2
AcquisitionMeth: DRUGS.M
Integrator : RTE



\*\*\*NO INTEGRATED PEAKS\*\*\*

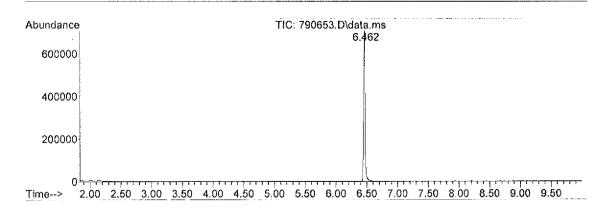
File Name : I:\06\_03\_11\790653.D

Operator : LAG

Date Acquired : 4 Jun 2011 12:46

Sample Name :

Submitted by : ASD
Vial Number : 5
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
6.462	1102187	100.00	100.00

File Name : I:\06 03 11\790653.D

Operator : LAG

Date Acquired 4 Jun 2011 12:46

Sample Name

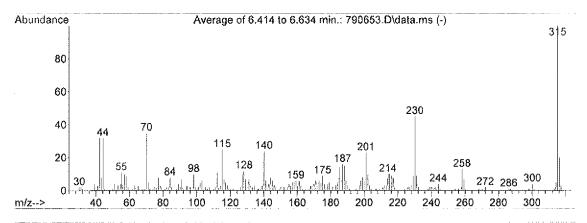
: ASD Submitted by Vial Number 5 : AcquisitionMeth: DRUGS,M Integrator : RTE

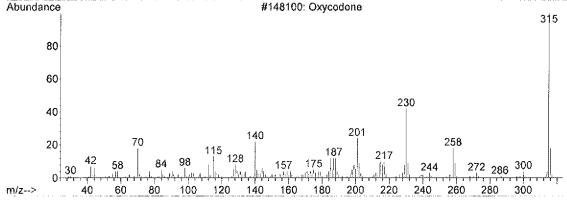
Search Libraries: C:\Database\SLI.L Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST08.L

C:\Database\PMW TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1	6.46	C:\Database\NIST08.L		
		Oxycodone	000076-42-6	99
		Oxycodone	000076-42-6	99
		Oxycodone	000076-42-6	99





File Name : I:\06\_03\_11\790655.D

Operator : LAG

Date Acquired : 4 Jun 2011 13:13

Sample Name : BLANK

Submitted by

Vial Number : 2 AcquisitionMeth: DRUGS.M Integrator : RTE

Abundance TIC: 790655.D\data.ms

3000

2000

1000

Time--> 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 6.00 6.50 7.00 7.50 8.00 8.50 9.00 9.50

Ret. Time Area Area % Ratio %

\*\*\*NO INTEGRATED PEAKS\*\*\*

File Name : I:\06\_03\_11\790656.D

Operator : LAG

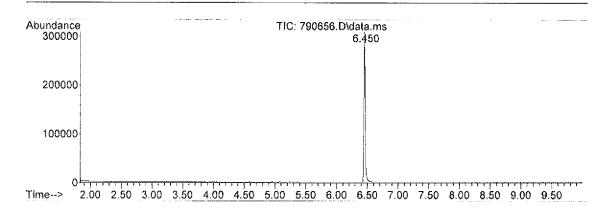
Date Acquired : 4 Jun 2011 13:26

Sample Name : OXYCODONE STD

Submitted by Vial Number AcquisitionMeth: DRUGS.M

77

Integrator : RTE



Ret. Time	Area	Area %	Ratio %
6.450	456231	100.00	100.00

File Name : I:\06\_03\_11\790656.D

Operator : LAG

Date Acquired 4 Jun 2011 13:26

: OXYCODONE STD Sample Name

Submitted by

Vial Number 77 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 C:\Database\NIST08.L Minimum Quality: 80

C:\Database\PMW TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1	6.45	C:\Database\NIST08.L Oxycodone Oxycodone Oxycodone	000076-42-6 000076-42-6 000076-42-6	99 99 99

